

Massachusetts Department of Environmental Protection
Safe Drinking Water Act Assessment Advisory Committee
Annual Report to the Massachusetts Legislature
January – December 2009

Sixteen Years of Supporting Implementation of the Federal Safe Drinking Water Act in Massachusetts



Shoreline of Wachusett Reservoir, West Boylston, MA
& Old Stone Church Historic Building

This information is available in alternate format. Contact Donald M. Gomes, MassDEP's ADA Coordinator,
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Message for 2009

The message for 2009 is, once again, that the world of the public water supplier is increasingly important, complex and challenging. These certified professionals are responsible for providing safe drinking water to 6.3 million people. The Assessment continues to be an important source of funding that supports public water systems. The Committee continues to endorse and support the Massachusetts Department of Environmental Protection's use of Assessment funding.

Background

Since 1993 the Safe Drinking Water Act Assessment has helped the Massachusetts Department of Environmental Protection (MassDEP)'s Drinking Water Program maintain primacy to implement the federal Safe Drinking Water Act (SDWA). The Assessment, paid for by public water systems and their customers, is \$8.50 per million gallons of water used each year. Last year public water systems reported that 287,660 million gallons of water were used in the prior calendar year. That figure will generate \$2.4 million of Assessment revenue for fiscal year 2011.

There are 1,721 public water systems in Massachusetts. Public water systems include not only municipal systems but restaurants, day care facilities, campgrounds and many other types of businesses that serve water, through a private source, to employees and customers. By maintaining primacy, MassDEP is able to offer specialized technical assistance and compliance programs that save public water systems and their customers millions of dollars.

The Safe Drinking Water Act Assessment Advisory Committee is responsible, through MGL Chapter 21A, for recommending the Assessment rate each year to MassDEP's Commissioner; monitoring the Assessment Program; and submitting an Annual Report to the Legislature. The committee is composed of eleven members including seven public water suppliers. The members and their affiliations are listed on page three. Committee meetings are held at least quarterly and are open to the public.

Highlights of Work at MassDEP Funded by the Assessment

As in other areas, the costs of operating a public water system continue to rise. The SDWA Assessment is an important piece of funding that supports public water systems. A complete list of activities funded fully or partly at MassDEP through Assessment funding is included at the end of this report. Highlights of that work include the following programs.

Green Jobs Training and Placement Partnership

Industry representatives estimate that 15%-20% of all drinking water operators will be retiring within the next five years. MassDEP, in collaboration with partners, launched the Green Jobs Training and Placement Partnership (GJPP) in an effort to train replacements for that retiring workforce. The GJPP includes the following components: 1) train students at vocational and technical high schools and in community-based adult education programs in the basics of

drinking water operations; 2) incorporate a drinking water operator training class into the community and state college network; and 3) provide on-site field training through internships. MassDEP identified public water suppliers to serve as mentors for the graduates of the training programs.

MassDEP's partners include Massachusetts community colleges; Massachusetts technical and vocational high schools; Massachusetts Water Works Association; New England Water Works Association; community based adult education programs; and others. The GJPP focuses on, but is not limited to, EPA-designated Environmental Justice Areas.

Training for Public Water Suppliers

In 2009 the Drinking Water Program trained public water suppliers across the state on new federal requirements and guidelines, including the Ground Water Rule; Emergency Response Regulations and Chemical Safety Strategy; Operator Certification; New Lead and Copper Rule Short Term Revisions; Consumer Confidence Reporting; and guideline changes that support the new requirements. The Drinking Water Program continued its annual Cross Connection Control training. Local plumbing inspectors were invited.

Small systems received additional training through the Massachusetts Coalition for Small System Assistance (MCSSA). In 2009 MCSSA offered multiple training and mentoring sessions on Operator Certification Preparation; Emergency Response; Chemical Safety; Communication; Energy and Conservation; Consumer Confidence Reporting; and the Ground Water Rule.

The Drinking Water Program also partnered with other organizations to provide training. Partners included MassDPH; New England Water Works Association; EPA; and the Massachusetts Health Officers' Association. In 2009 all public water suppliers were offered multiple opportunities to register electronically for training on important and timely topics.

Electronic Filing of Annual Statistical Reports

The Drinking Water Program is excited to announce a new secure, electronic way for public water suppliers to submit their Annual Statistical Report. Suppliers will access the new format, called eASR, through MassDEP's online reporting portal called eDEP – MassDEP's Online Filing System. Most of the information on the form will be prepopulated for each public water system, providing substantial savings of time, paper, and other resources. Additional features of eASR include the ability to share the eASR with multiple users, save electronic copies, offer built in math calculations, and the automatic issuance of a receipt upon submittal of the form.

Conclusion

The committee asks State Legislators, municipal officials, and the public to support local water suppliers as they safeguard the quality and quantity of drinking water for the future. For additional information about the SDWA Assessment Advisory Committee, please contact Konstantin Eliadi, Committee Chair, at the City of Worcester Water Operations Division at 508-799-1486 or eliadik@ci.worcester.ma.us.

Safe Drinking Water Act Assessment Advisory Committee Members – 2009

Name, Organization Represented, Affiliation, and Year of Appointment

Konstantin Eliadi, Chair, *Massachusetts Water Works Association*, Director of Water Operations, Worcester DPW, 2005
Elizabeth Ainsley Campbell, Vice Chair, *Environmental Agency*, Exec. Director, Nashua River Watershed Association, 2002
Thomas Newton, *Western MA Waterworks Association*, Superintendent, Easthampton Water Dept., 2001
Jon Beekman, *Associated Industries of Massachusetts*, Director of Municipal Services, SEA Consultants, Inc., 1993
Anthony Marques, *New England Water Works Association*, Director, Hudson DPW, 1994
Henry Papuga, *National Association of Water Companies*; Manager, Milford Water Company, 1998
Wayne Southworth, *MassDEP Designee*, Director, Easton DPW, 1993
Leo Potter, *Environmental Agency*, Canoe River Aquifer Advisory Committee & Sup't. Foxborough Water Dept., 2005
Richard Maccagnano, *Non-Community Systems*, Holliston Board of Health, 2007
Neal Merritt, *Rural Water Systems*, Plymouth County Water Works Association & Hanson Water Department, 2008
David Baier, *Massachusetts Municipal Association*, 1993; Tom Philbin, attendee

Alternates

Ray Raposa, *Alternate for New England Water Works Association*, Executive Director, NEWWA
Joseph Slattery, *Alternate for Western Mass. Water Works Association*, Southampton Water Department
Barry Woods, *Alternate for Rural Water Systems*, Superintendent, Buzzards Bay Water District
Jennifer Pederson, *Alternate for Mass. Water Works Association*, Executive Director, MWWA

Massachusetts Department of Environmental Protection
ACCOMPLISHMENTS DIRECTLY SUPPORTED BY THE SAFE DRINKING WATER ACT ASSESSMENT
January 1 through December 31, 2009

- Saved public water systems (pws) millions of dollars by maintaining Safe Drinking Water Act (SDWA) Primacy.
- MassDEP reviewed 1,115 water quality monitoring waiver applications and issued 257 volatile organic compound waivers, 819 synthetic organic compound waivers; 694 inorganic compound waivers; 316 arsenic waivers; and 819 perchlorate waivers. This work has saved pws \$2.85 million for the current waiver period (2008-2010).
- Provided assistance with over 700 water protection issues at reservoirs and river sources.
- Approved watershed protection plans for 4 pws. Maintained incentives for developing plans.
- Continued to implement the Wellhead Protection Program which provides compliance and technical assistance.
- Approved municipal wellhead protection controls for 41 groundwater sources in 6 communities.
- Assisted 134 pws with wellhead protection issues.
- Conducted Drinking Water Supply Protection Grant Program – awarded \$510,000 to purchase land and conservation restrictions totaling 173 acres in water supply protection areas in 11 communities.
- Field verified 50 watershed delineations for reservoirs and updated GIS maps to reflect changes.
- Distributed fact sheets, guidance documents, and other technical assistance materials as requested.
- Continued to update web pages to improve access by pws, public officials, community groups & residents.
- Continued improving the bulk upload tool for laboratories to submit drinking water quality results on-line.
- Continued to conduct compliance assistance activities for Statistical Reporting, Ground Water Under the Influence, Consumer Confidence Reporting, Cross Connection, and Certified Operator requirements.
- Maintained electronic publishing and access for the quarterly *In the Main* newsletter.
- Published 4 issues of *In the Main* covering source water protection; eDEP; vacuum filtration; Water Management Act; Awards Program; emergency preparedness; Consumer Confidence Reports; underground storage tanks; chemical safety; operator exams; contract operators; certified laboratories; geothermal well guidelines; Well Driller Certification Program; Ground Water Rule; regulatory updates.
- Maintained a free on-line template for systems to use in complying with Consumer Confidence Reporting (CCR).
- Notified new community water systems of CCR requirements for 2009.
- Mailed out CCR reminder postcards and provided CCRs for all (948) Transient Non-Community Systems.
- Reviewed 528 CCRs, provided Technical Assistance Reports and tracked CCR compliance.
- Provided materials for statewide Board of Health workshops as requested.
- Mailed out annual letter to Boards of Health to update members on drinking water issues and MassDEP work.
- Worked with the Office of the State Geologist and United States Geological Survey on topics of mutual interest.
- Participated on the New England Groundwater Resources Initiative Committee.
- Issued 34 Drinking Water Compliance Awards during June 2009.
- Board of Certification of Operators of Drinking Water Supply Facilities approved 52 new training courses.
- Registered 28 new pws that were previously unregulated.
- Reviewed and/or approved 10 new large capacity public water sources.
- Presented workshop to pws that featured a tabletop exercise on preparing for a pandemic flu outbreak.
- Provided instructors for New England Water Works Association (NEWWA) Bedrock Well Courses.
- Provided instructor for the Cross Connection Control Program (CCCP) Workshops.
- Performed 9 CCCP audits in NERO, CERO, and SERO. Issued 263 Cross Connection Certificates.
- Planned and implemented three CCCP Annual Workshops attended by 213 individuals.
- Provided instructor for 12 Backflow Tester and Cross Connection Survey classes at NEWWA.
- Provided CCCP technical assistance to 189 individuals/cities/towns.
- Provided technical assistance to pre-K through 12 schools on lead in drinking water. Worked with partners to prepare & distribute guidance on Lead in Drinking Water at Child Care Facilities to 3,000 facilities. Reviewed 50 Lead in Drinking Water Maintenance Checklists and 150 laboratory results from schools. Provided assistance to Multi-Agency Task Force for Schools to develop a facility managers workbook and training class.
- Conducted two Emergency Response Training – Pandemic Flu Exercises for public water suppliers.
- Provided instructors for NEWWA Innovative Source Development Course.
- Conducted training in the four regions on Guideline Changes; The Ground Water Rule; Emergency Response; Operator Certification Requirements; Lead and Copper Rule Revisions; Consumer Confidence Reporting.

Massachusetts Department of Environmental Protection
ACCOMPLISHMENTS PARTLY/INDIRECTLY SUPPORTED BY THE SAFE DRINKING WATER ACT ASSESSMENT
January 1 through December 31, 2009

- Continued to offer free training programs for small system operators through an EPA grant.
- Continued the implementation of the Capacity Development Program, which concentrates on providing financial, managerial and technical assistance to small water suppliers.
- Reviewed the technical, financial, and managerial operations of 196 community & non-transient non-community and 154 transient non-community pws. The Massachusetts Coalition for Small System Assistance provided 4 group training sessions on the Ground Water Rule; 128 site visits; and 17 mentoring sessions.
- Received EPA funding to conduct two statewide source water protection workshops for pws focusing on addressing microbial threats. 58 people participated and training contact hours (TCHs) were awarded.
- Conducted annual inspections at 6 public surface water systems that have waivers from filtration.
- Assisted surface water suppliers with developing protection plans and bylaws and obtaining log credit.
- Participated on the State Vegetation Management Panel; State Pesticide Board; NEWWA Source Water Advisory Group, Groundwater Advisory Committee, Groundwater Resource Initiative, and Drinking Water Operators Certification Committee; Multi-Agency Task Force on Schools; National Drinking Water Advisory Council Small Systems Implementation Work Group; MassDEP Laboratories Advisory Committee; Mass. Water Works Association (MWWA) Technical Advisory Committee; New England Interstate Water Pollution Control Commission Source Water Protection Work Group; Well Driller Certification Program Technical Advisory Committee. Participated on EPA work groups for Emergency Preparedness, Disinfection Byproducts Rule, Long Term 2 ESWTR, Data Sharing, Ground Water Rule, Public Notification, Unregulated Contaminant Monitoring. Participation on these committees places MA interests at the national level.
- Participated in establishing guidelines and uniformity in cross connection programs throughout New England as a member of the NEWWA Board of Certification of Backflow Prevention and Cross Connection Control.
- The annual operator certification report was approved by EPA.
- Conducted 853 Underground Injection Control (UIC) inspections; returned 68 Class V wells to compliance; assisted 198 locations into compliance through registration or permitting. Processed 250 registrations and/or closure of 500 Class IV/V wells. Provided technical assistance about the UIC Program to MassDEP staff conducting multi-media inspections; the regulated community; and local officials. Developing electronic filing of UIC registrations and closure forms and electronic reporting of UIC data to EPA.
- Adopted guidelines for the design, installation, operation and closure of open and closed loop geothermal wells.
- Presented new geothermal well guidelines at the Annual New England Water Well Expo; American Ground Water Trust Education Forum; Ground Source Heating & Cooling for Residential and Commercial Properties; Northeast Private Well Water Symposium; and to a health class at Worcester State College.
- Participated in workshops on geothermal heat pumps, groundwater protection, and the UIC Program.
- Developed two chemical checklists for permit applications to expedite approval process.
- Issued 7 Water Management Act Permits & 7 Permit Amendments; 15 Five-year Reviews, 5 20-Year Renewals.
- Participated in the Office of the State Geologist State Mapping Advisory Committee.
- Provided comments on MassDEP Bureau of Waste Site Cleanup, Title 5, Stormwater Policy and Groundwater Discharge Program regulations & policy development for consistency with the Drinking Water Program.
- Continue to conduct water resources investigations of communities dependent on bedrock wells in I-495 belt.
- Completed a ground water model to begin evaluating the safe yield of the Plymouth-Carver Aquifer.
- Conducted arsenic and uranium in bedrock aquifer investigation to assess correlations between contaminant concentrations and bedrock geology.
- Provided technical assistance to local Boards of Health in revising private well regulations.
- Provided technical support to the Wastewater Management Program on ground source heat pump permitting.
- Completed extensive revisions to the 2001 guidelines for pws with stakeholder input – now on web page.
- Issued policy on discharges from pws pumping facilities -- implementing BMPs and registering as Class 5 wells.
- Conducted regular meetings with MWRA including scheduling compliance reviews of monthly reports.
- Fluoridation coordination with the Mass. DPH Office of Oral Health.
- Continued rule implementation work for 90 pws under the LT2ESWTR.
- Presented new guidelines for ground source heat pumps and the transfer of the Well Driller Certification Program to MassDEP at the Mass. Health Officers Association conference.
- Presented the status of the Well Driller Certification Program at Mass. Ground Water Association meetings.
- Updated the Well Driller Certification Program database with 3,500 well completion reports.
- Provided speakers on water supply topics to local/regional events and for operator training courses through NEWWA.
- Performed 3 Comprehensive Performance Evaluations of drinking water facilities to enhance their performance.
- Promulgated regulatory changes for Lead and Copper Rule and Ground Water Rule.
- Revised the Total Coliform Rule to eliminate slower confirming method.